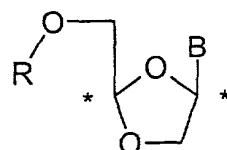


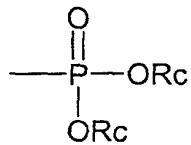
Abstract

The present invention provides a novel method for treating leukemia and more particularly acute myelogenous leukemia (AML) in a host comprising administering to the host a therapeutically effective amount of a compound having the formula I:



(I)

wherein B is cytosine or 5-fluorocytosine and R is selected from the group comprising H, monophosphate, diphosphate, triphosphate, carbonyl substituted with a C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₆₋₁₀ aryl, and



wherein each R_c is independently selected from the group comprising H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl and an hydroxy protecting group; and wherein said compound is substantially in the form of the (-) enantiomer.